UNDERSTANDING ARTIFICIAL INTELLIGENCE

Deep Learning, Based-Rules, and Neural Networks

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CONTEXT

Work from previous lessons

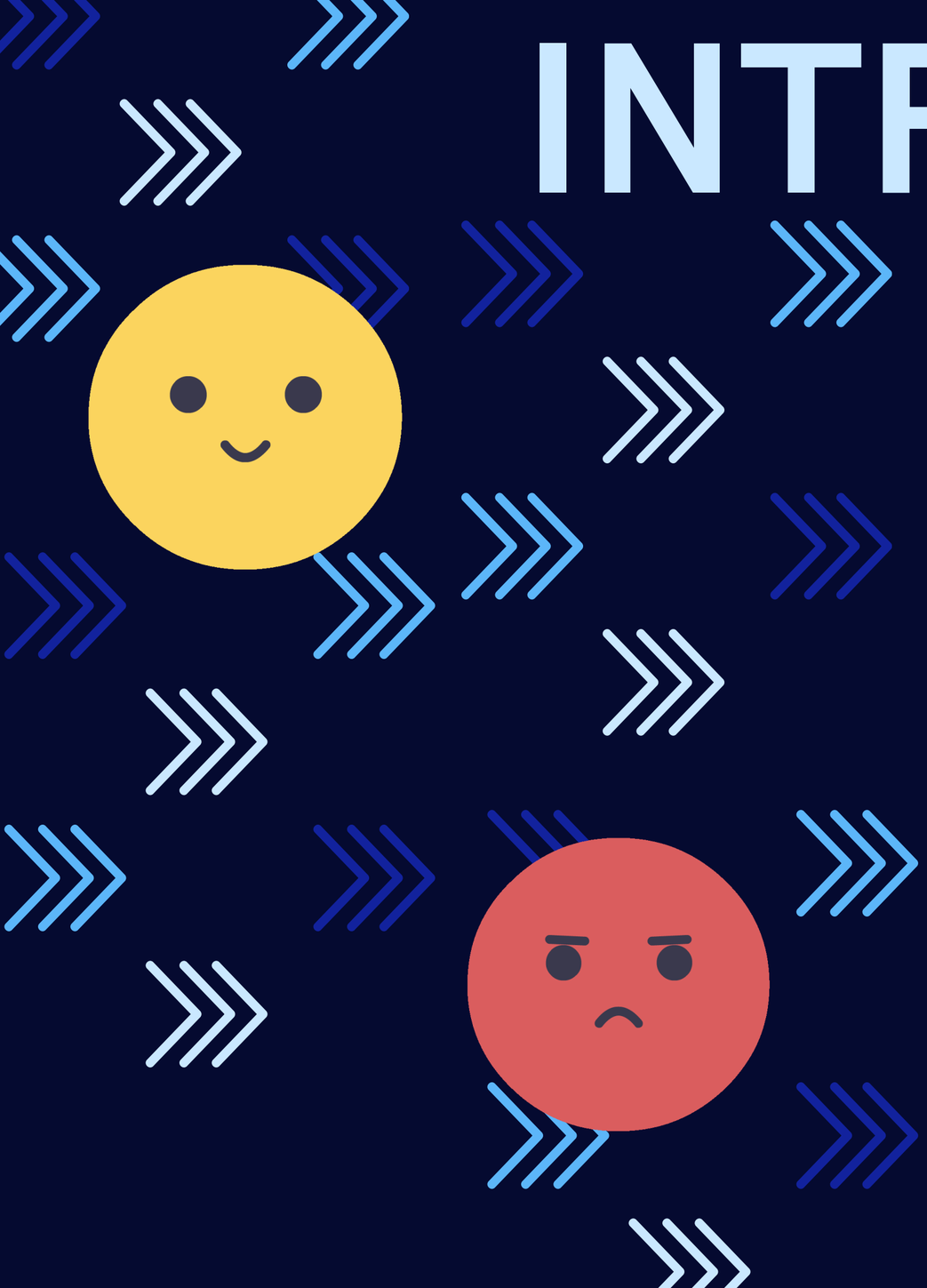
Code provided

Investigation

Experimentation

Conclusion

INTRODUCTION



- Rule-based method
- Neural Networks
- Deep Learning

RESEARCH QUESTION

How rules based, deep learning and neural networks
can identify human emotions in text and
how are their different approaches in the code?

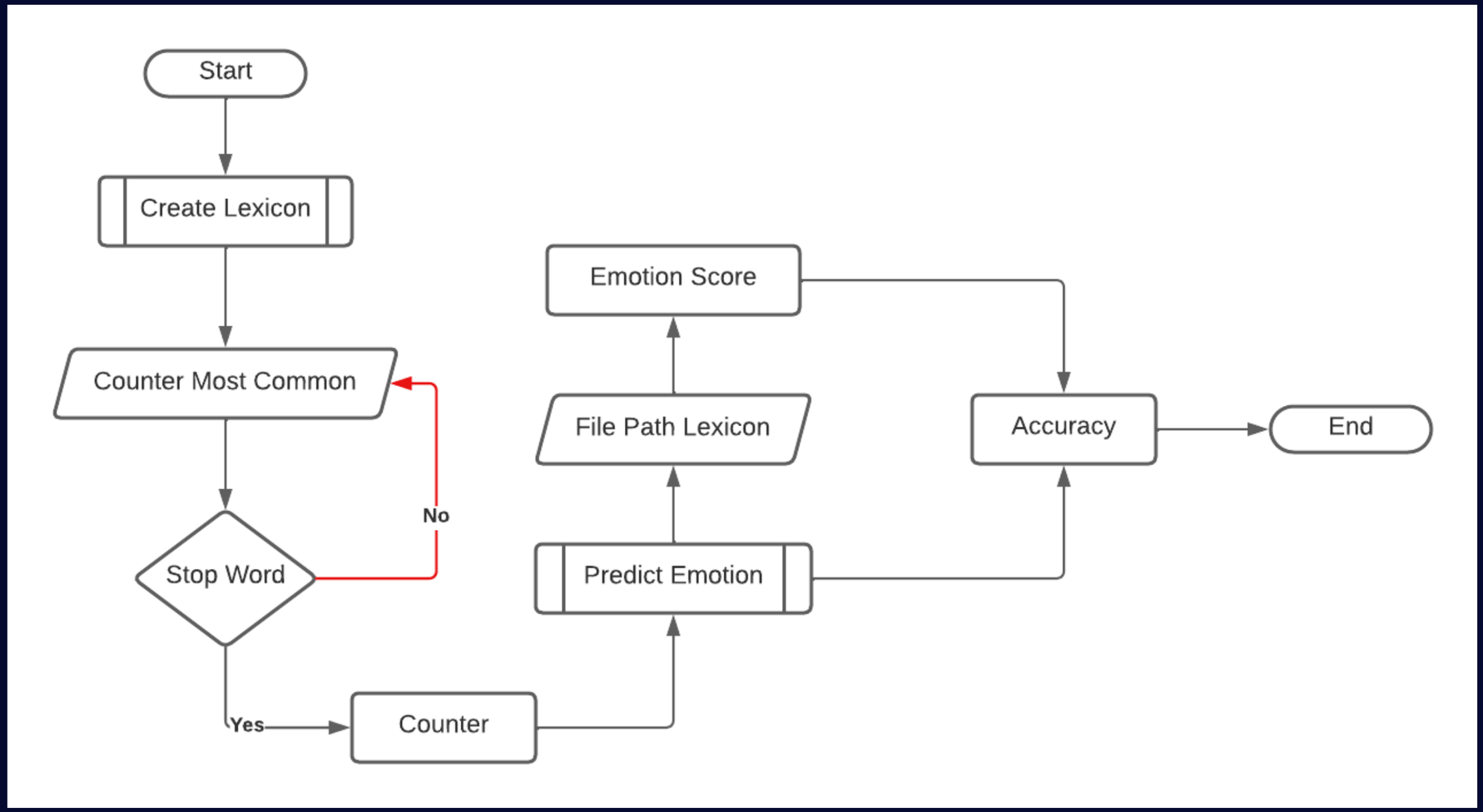
INVESTIGATION

- Research papers
- Articles
- Work from scientists
- Books related to AI
- Internet research

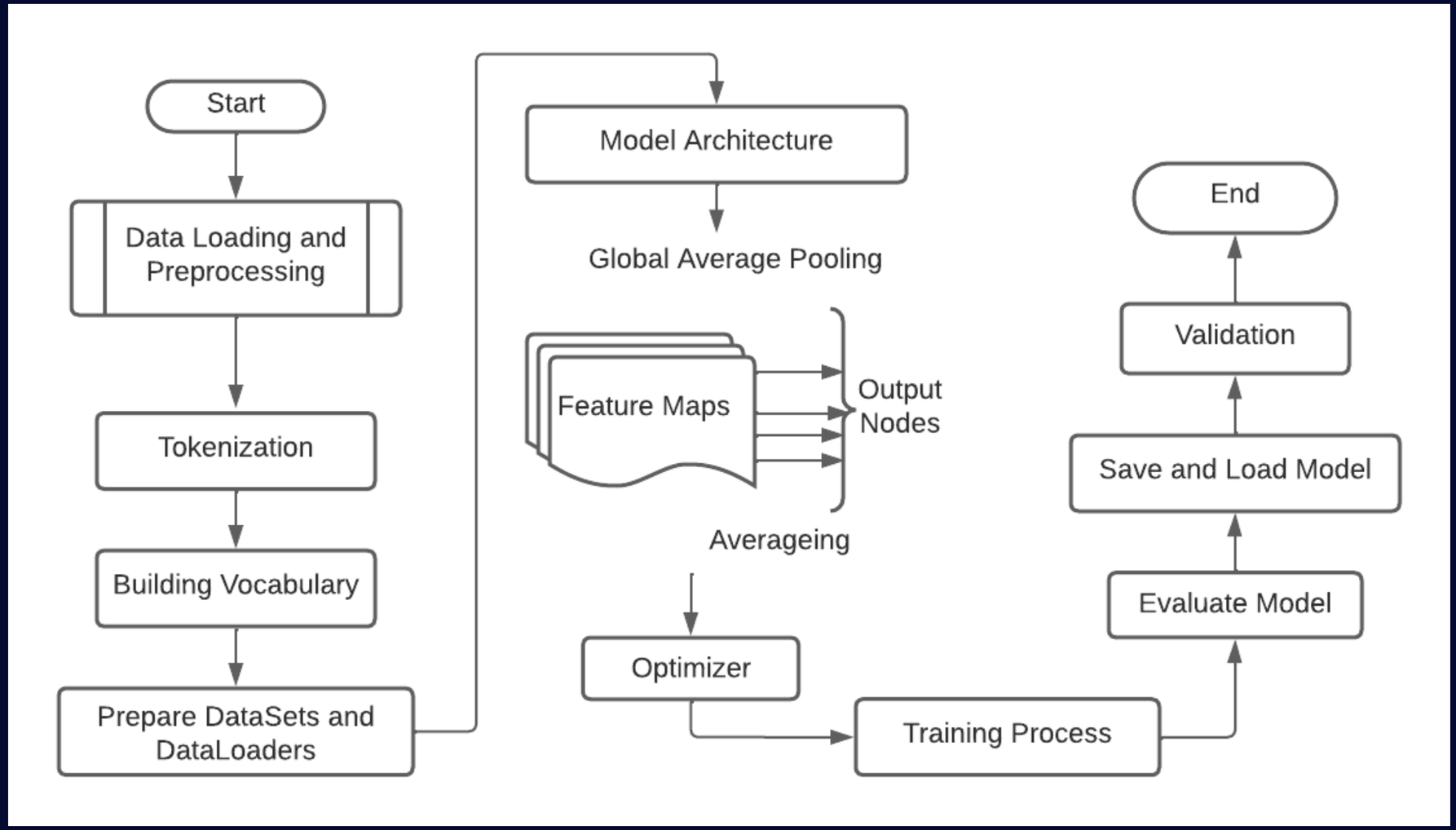
EXPERIMENTATION

- Understanding of the method
- Flow Chart
- At least 10 hyperparameters
- Accuracy
- Comparison

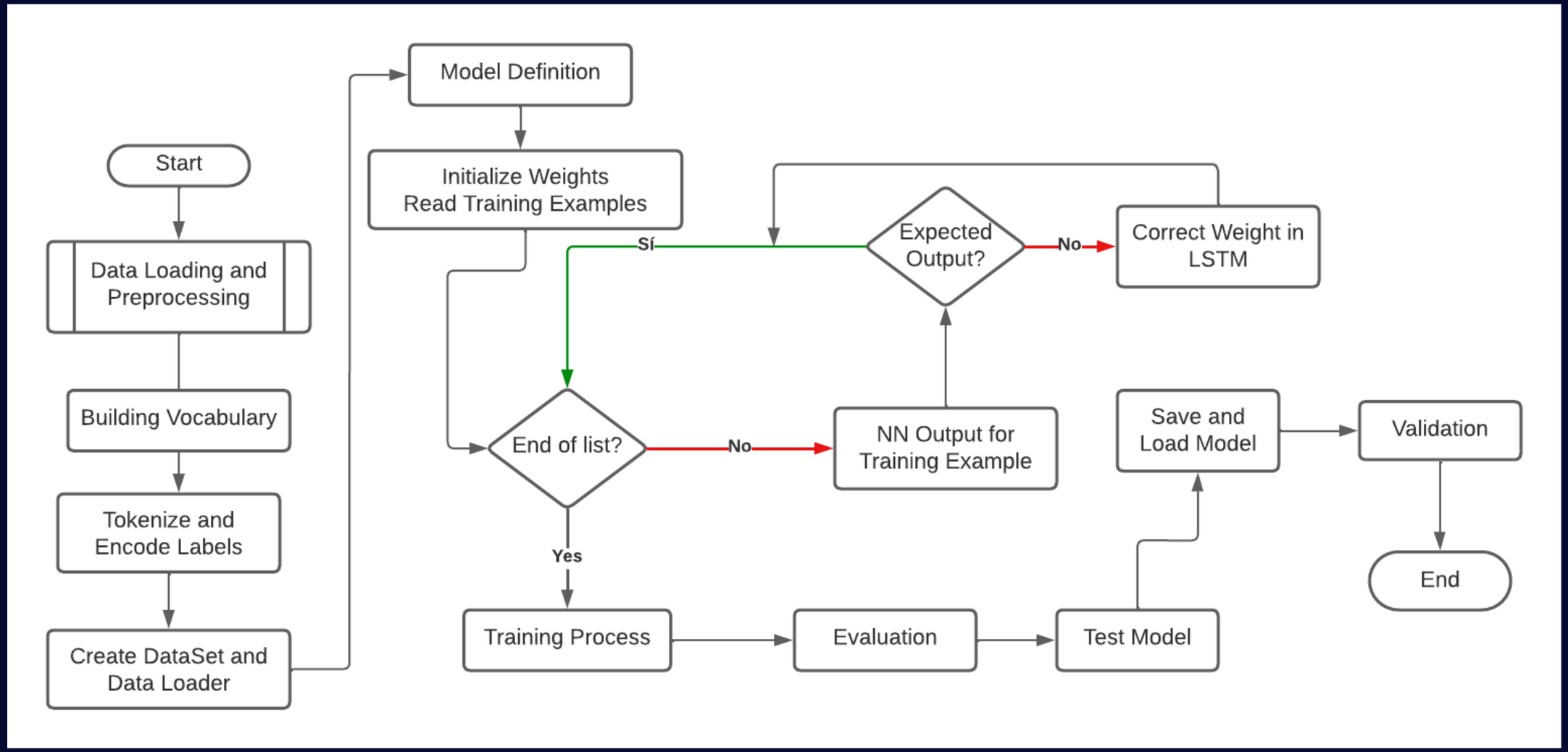
BASED-RULE METHOD



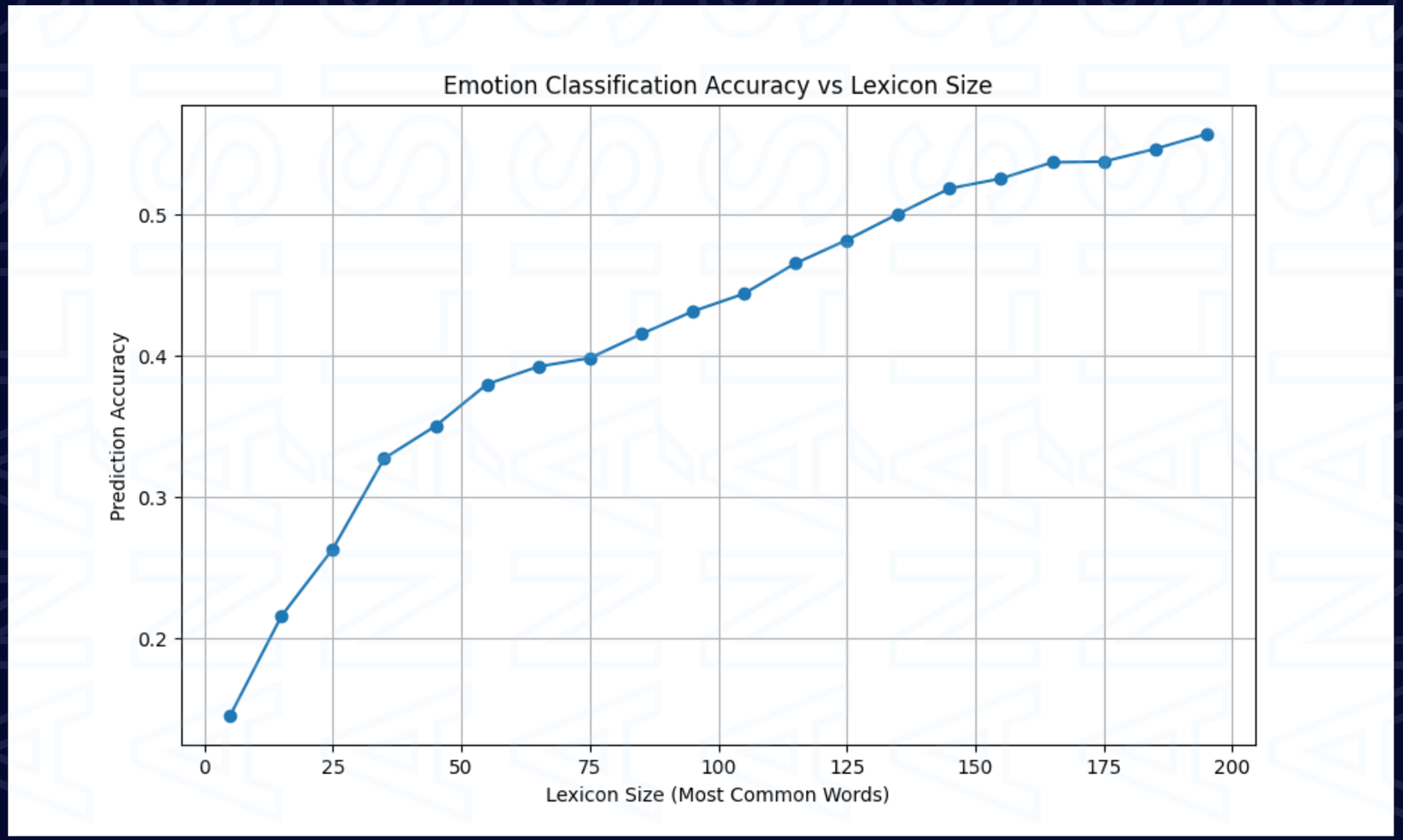
NEURAL NETWORKS



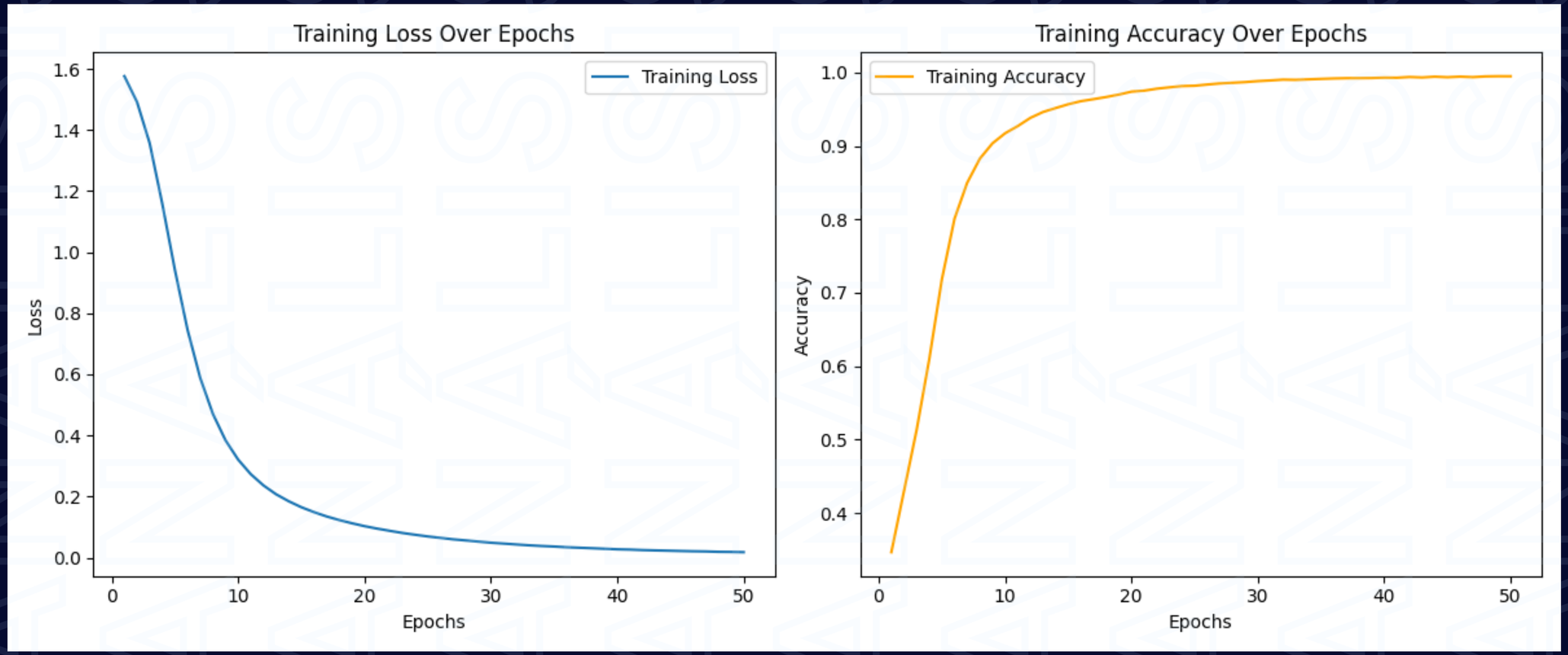
DEEP LEARNING



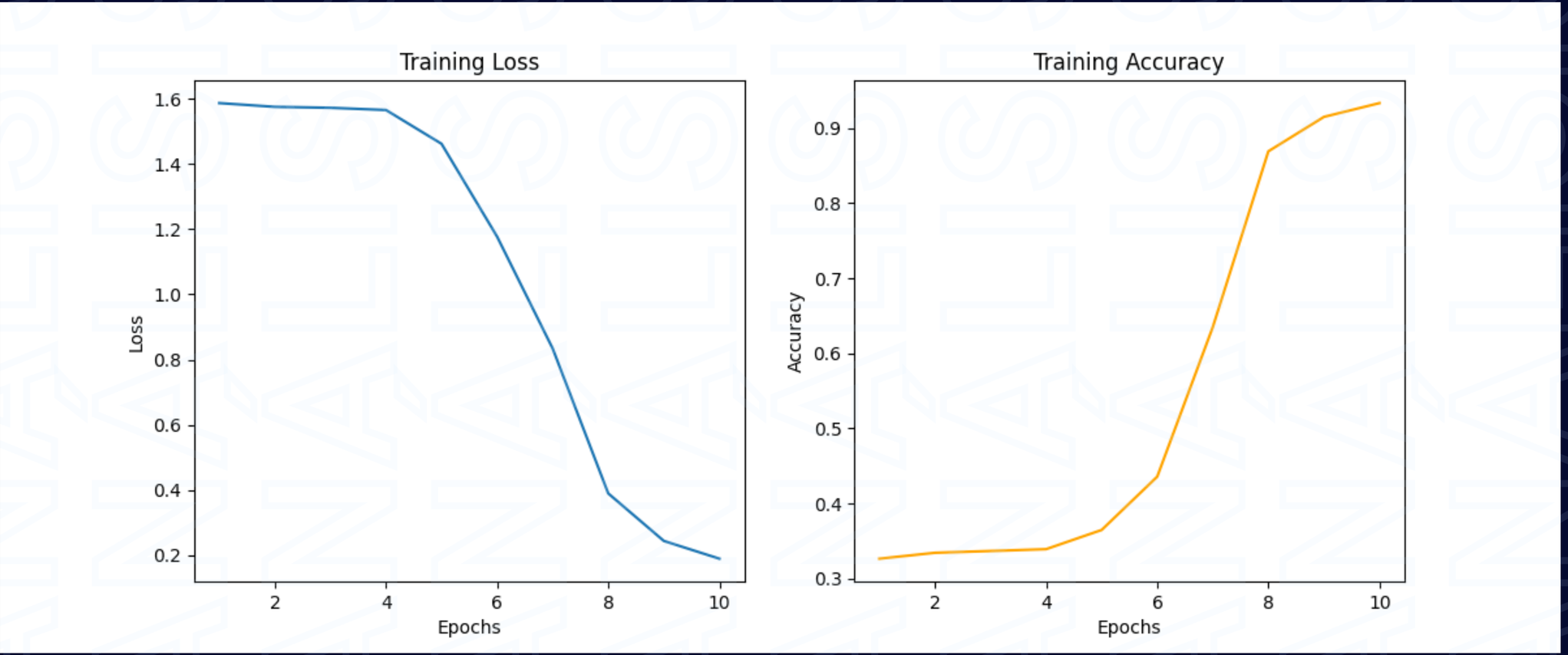
Based-Rule Results



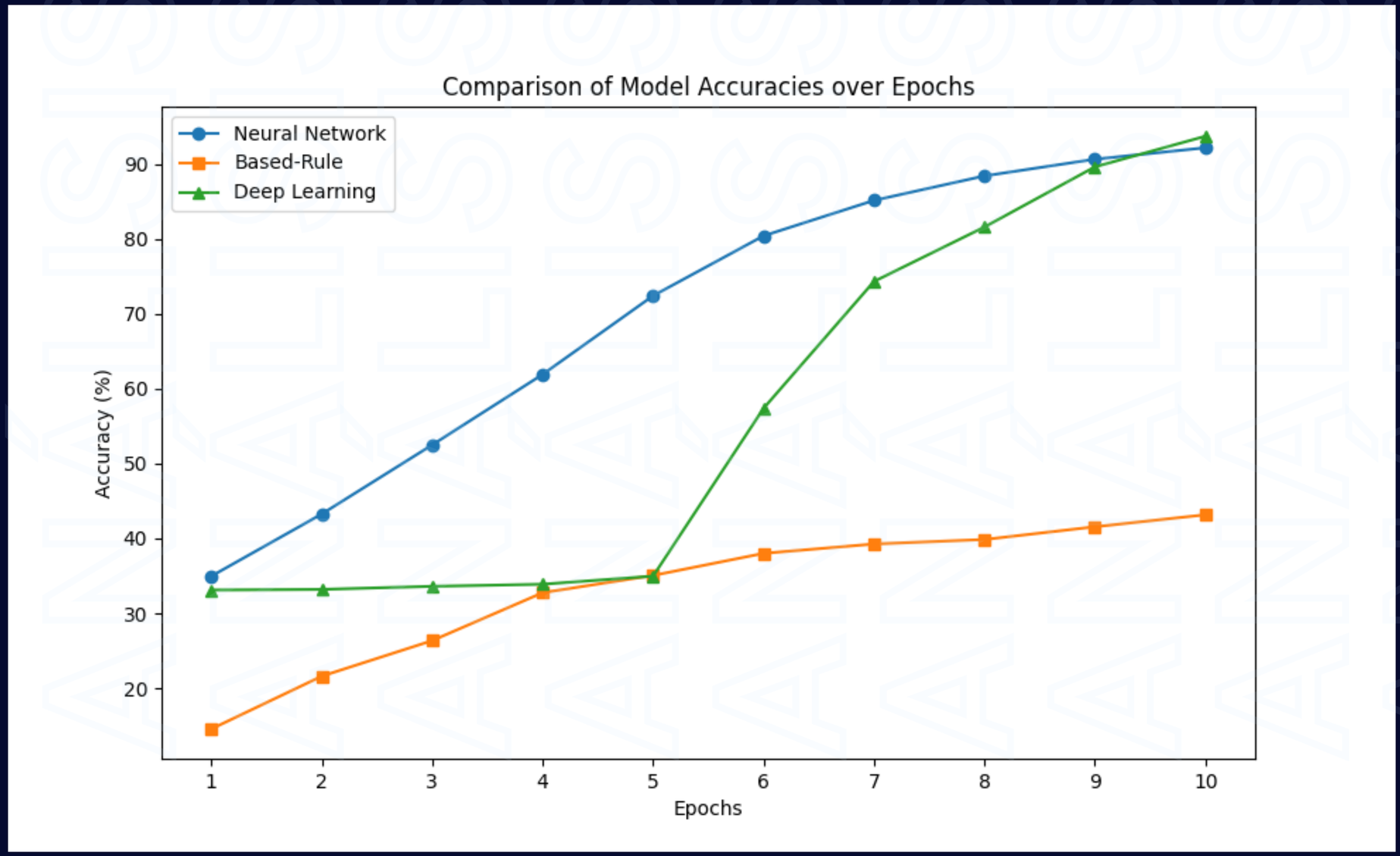
Neural Network Results



Deep Learning Results



Comparison


Comparison of Model Accuracies over Epochs
Neural Network
Based-Rule
Deep Learning
Accuracy (%)
Epochs
20
30
40
50
60
70
80
90
1
2
3
4
5
6
7
8
9
10

CONCLUSION

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- Rule-based has a controlled environment but limited by complex data
- Neural Networks better adaptability in recognizing complex patterns
- Deep Learning highest efficiency for understanding and handling sequential data

QUESTIONS

THANK YOU